



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,297	07/10/2003	David Brault	84215-302 ADB	1603

23529 7590 07/19/2005

ADE & COMPANY
1700-360 MAIN STREET
WINNIPEG, MB R3C3Z3
CANADA

EXAMINER

GELLNER, JEFFREY L

ART UNIT	PAPER NUMBER
----------	--------------

3643

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,297

Applicant(s)

BRAULT ET AL.

Examiner

Jeffrey L. Gellner

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 3643

DETAILED ACTION

Upon reconsideration of the prior art the allowability of claims 2, 3, and 6 is withdrawn.

Examiner regrets any inconvenience to Applicant.

Drawings

The drawings were received on 11 May 2005. These drawings are accepted.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 6, line 1, the language of "The greenhouse according to claim 1" is unclear in light of the subsequent amended language of "A greenhouse comprising" of lines 1 and 2.

In claim 6, line 37, "ends panels" should probably be --end panels--.

Claim Rejections - 35 USC §103

The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, 7, and 8 are rejected under 35 U.S.C. §103(a) as being unpatentable over Armstrong (US 3,882,306) in view of Fogg et al. (US 4,163,342).

As to Claim 1, Armstrong discloses a greenhouse (col. 1 line 5) comprising an exterior wall structure with sides and endwalls (inherent in greenhouses) made of primarily transparent panels (inherent in greenhouses) with a rail (65 of Fig. 1) with a plurality of lighting fixtures (61 of Fig. 1) along the rail; each lighting fixture comprising a mounting member (13 and 19 of Figs. 2 and 3) for attachment to the rail; a generally parabolic reflector (47 of Figs. 2-4) with a cross-section which is substantially constant along a parabolic axis (Fig. 4) and the parabolic reflector carried on the mounting member; a lighting bulb support (col. 3 lines 16-19); wherein the mounting member of each lighting fixture is pivotal about the axis generally parallel to a parabolic axis (13 of Figs. 3 and 4) of the parabolic reflector relative to the parabolic reflector and the bulb so as to adjust the angle of the directed light relative to the rail; and wherein the lighting is adjusted downward (Figs. 1-4) and inward the sidewalls (inherent when adjusted) and maintained at a fixed direction angled vertically downwardly and inwardly or downwardly (for downwardly and inwardly see "come to rest" at col. 4 lines 13-20; for downwardly - this would occur if the arc is set at between 35 and 51 of Fig. 3). Not disclosed is a plurality of rails being three rails arranged in parallel spaced positions with one intermediate and two side rails each adjacent to the side walls. Fogg et al., however, discloses a plurality of rails, three (shown in Fig. 1), arranged in parallel spaced positions (shown in Fig. 1) with one intermediate and two side rails each adjacent to the side walls (Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the greenhouse of Armstrong by having a

Art Unit: 3643

plurality of rails, three, as disclosed by Fogg et al. so as to have sufficient lighting for a large, economically-sized greenhouse.

As to Claim 4, Armstrong as modified by Fogg et al. further disclose the generally parabolic reflector with a recessed notch at an axial plane (region created by 33 in Fig. 2 of Armstrong).

As to Claim 5, Armstrong as modified by Fogg et al. further disclose the recessed notch being v-shaped (33 of Fig. 4 in that any two of the 33s will form a "v").

As to Claim 7, not disclosed is an endwall with a plurality of posts and beams. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the greenhouse of Armstrong as modified by Fogg et al. by having the endwall with a plurality of posts and beams as a known construction design for greenhouses to provide structural integrity.

As to Claim 8, Armstrong as modified by Fogg et al. further disclose the rails with a common height (see Fogg et al.).

Claims 9 and 10 are rejected under 35 U.S.C. §103(a) as being unpatentable over Armstrong (US 3,882,306) in view of Fogg et al. (US 4,163,342) in further view of Baker et al. (US 6,312,139 B1).

As to Claim 9, the limitations of Claim 8 are disclosed as described above. Not disclosed are the rail heights adjustable. Baker et al., however, discloses a greenhouse with adjustable rails (abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the greenhouse of Armstrong as modified by Fogg et al. by having

Art Unit: 3643

adjustable rails as disclosed by Baker et al. so as to increase light to the plants to speed plant growth.

As to Claim 10, Armstrong as modified by Fogg et al. and Baker et al. further disclose a spacing of 5 feet (from Baker et al.) depending upon the needs of the plants.

Claims 2, 3, and 6 are rejected under 35 U.S.C. §103(a) as being unpatentable over Armstrong (US 3,882,306) in view of Fogg et al. (US 4,163,342) in further view of Henderson Jr. et al. (US 4,173,037).

As to Claim 2, Armstrong discloses a greenhouse (col. 1 line 5) comprising an exterior wall structure with sides and endwalls (inherent in greenhouses) made of primarily transparent panels (inherent in greenhouses) with a rail (65 of Fig. 1) with a plurality of lighting fixtures (61 of Fig. 1) along the rail; each lighting fixture comprising a mounting member (13 and 19 of Figs. 2 and 3) for attachment to the rail; a generally parabolic reflector (47 of Figs. 2-4) with a cross-section which is substantially constant along a parabolic axis (Fig. 4) and the parabolic reflector carried on the mounting member; a lighting bulb support (col. 3 lines 16-19); wherein the mounting member of each lighting fixture is pivotal about the axis generally parallel to a parabolic axis (13 of Figs. 3 and 4) of the parabolic reflector relative to the parabolic reflector and the bulb so as to adjust the angle of the directed light relative to the rail; and wherein the lighting is adjusted downward (Figs. 1-4) and inward the sidewalls (inherent when adjusted) and maintained at a fixed direction angled vertically downwardly and inwardly or downwardly (for downwardly and inwardly see "come to rest" at col. 4 lines 13-20; for downwardly - this would occur if the arc is set at between 35 and 51 of Fig. 3). Not disclosed is a plurality of rails being

Art Unit: 3643

three rails arranged in parallel spaced positions with one intermediate and two side rails each adjacent to the side walls; and, the lighting bulb's support movable relative to the generally parabolic reflector so as to move the lighting bulb relative to the parabolic axis. Fogg et al., however, discloses a plurality of rails, three (shown in Fig. 1), arranged in parallel spaced positions (shown in Fig. 1) with one intermediate and two side rails each adjacent to the side walls (Fig. 1); and, Henderson Jr. et al. discloses a lighting bulb's support movable relative to the generally parabolic reflector so as to move the lighting bulb relative to the parabolic axis (Figs. 1-4 and col. 2 lines 60-69). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the greenhouse of Armstrong by having a plurality of rails, three, as disclosed by Fogg et al. so as to have sufficient lighting for a large, economically-sized greenhouse and to further modify the greenhouse by having a bulb that can pivot in its fixture as disclosed by Henderson Jr. et al. so as to adjust the lighting in ever greater angles so as to achieve greater coverage.

As to Claim 3, Armstrong as modified by Fogg et al. and Henderson Jr. et al. further disclose the generally parabolic reflector having end walls (28 and 32 of Fig. 2) at right angles to the axial plan and the lighting bulb support is movable along the end wall.

As to Claim 6, Armstrong discloses a greenhouse (col. 1 line 5) comprising an exterior wall structure with sides and endwalls (inherent in greenhouses) made of primarily transparent panels (inherent in greenhouses) with a rail (65 of Fig. 1) with a plurality of lighting fixtures (61 of Fig. 1) along the rail; each lighting fixture comprising a mounting member (13 and 19 of Figs. 2 and 3) for attachment to the rail; a generally parabolic reflector (47 of Figs. 2-4) with a cross-

Art Unit: 3643

section which is substantially constant along a parabolic axis (Fig. 4) and the parabolic reflector carried on the mounting member; a lighting bulb support (col. 3 lines 16-19); wherein the mounting member of each lighting fixture is pivotal about the axis generally parallel to a parabolic axis (13 of Figs. 3 and 4) of the parabolic reflector relative to the parabolic reflector and the bulb so as to adjust the angle of the directed light relative to the rail; and wherein the lighting is adjusted downward (Figs. 1-4) and inward the sidewalls (inherent when adjusted) and maintained at a fixed direction angled vertically downwardly and inwardly or downwardly (for downwardly and inwardly see "come to rest" at col. 4 lines 13-20; for downwardly - this would occur if the arc is set at between 35 and 51 of Fig. 3). Not disclosed is a plurality of rails being three rails arranged in parallel spaced positions with one intermediate and two side rails each adjacent to the side walls; and, the parabolic reflector having end walls at right angles to the axial plane of the parabolic axis and has inclined end panels extending from the end walls inwardly and upwardly toward an apex at a top of the generally parabolic reflector. Fogg et al., however, discloses a plurality of rails, three (shown in Fig. 1), arranged in parallel spaced positions (shown in Fig. 1) with one intermediate and two side rails each adjacent to the side walls (Fig. 1); and, Henderson Jr. et al. disclose the parabolic reflector having end walls (region around 25 in the reflector as shown in Figs. 1 and 4) at right angles to the axial plane of the parabolic axis and has inclined end panels (region around 23 in Fig. 1) extending from the end walls inwardly and upwardly toward an apex (region above bulb in Fig. 1) at a top of the generally parabolic reflector. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the greenhouse of Armstrong by having a plurality of rails, three, as disclosed by Fogg et al. so as to have sufficient lighting for a large, economically-sized

Art Unit: 3643

greenhouse and to further modify the greenhouse by having a bulb with ends walls as disclosed by Henderson Jr. et al. so as to adjust the lighting in ever greater angles so as to achieve greater coverage.

Response to Arguments

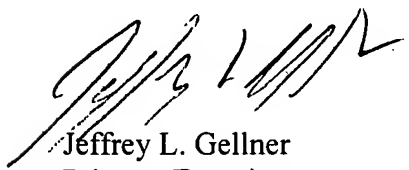
Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey L. Gellner whose telephone number is 571.272.6887. The examiner can normally be reached on Monday-Friday, 8:30-4:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on 571.272.6891. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrey L. Gellner
Primary Examiner
Art Unit 3643